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deposition run adjacent said guide relative to said suction force over a remainder of said smoking material deposition run; and

depositing additional smoking material on said run.

The additional claims fee of \$510.00 for the submission of five additional independent claims is being paid by the accompanying check No. 17262. Any additional fees necessitated by the submission of this Amendment are to be charged to the deposit account No. 10-1213 of the undersigned.

Marked-up copies of the amended claims are enclosed.

REMARKS

Applicant, his principal representatives in Great Britain, and the undersigned have carefully reviewed the first Office Action of May 22, 2002 in the above-identified U.S. patent application, together with the prior art references cited and relied on by the Examiner in the rejections of the claims. In response, claims 19-38, all of the claims pending in the application, have been amended. New independent claims 39-43 have been added. It is believed that all of the claims now pending in the application are patentable for the reasons to be set forth subsequently. Reexamination and reconsideration of the application, and allowance of the claims is respectfully requested.

The subject application discloses, and claims a method for incorporating fibriform smoke-modifying material in a smoking material rod. This fibriform material is self-

supporting, and as seen in Fig. 1, may be fed off a spool 14 by the action of feed rollers 11 and 12. Alternatively, the fibriform material may be a sequence of discrete fibriform elements. The fibriform material is fed to the smoking material rod-making machine in the area of a deposition run which is defined by a suction band that travels through the machine. A suction force is applied to the suction band and smoking material is fed up the tobacco feed chimney 2, between a pair of spaced trough guides and to the deposition run. The smoking material accumulates on the suction band as the band travels through the machine along the deposition run in the travel direction indicated by arrow A in Fig. 1.

The fibriform material enters the deposition run area of the rod-making machine at a point between the start and the end of the deposition run. The fibriform smoke-modifying material is caused to ascent toward the suction band by the suction force applied to the suction band. It is pulled, by the suction force, into contact with the particulate smoking material which has already been deposited on the suction band in the deposition run prior to the location along the deposition run at which the fibriform material is caused to ascent toward the suction band by the suction force. Once the fibriform material has been pulled into contact with the particulate smoking material already on the suction band, additional particulate smoking material is added to the already deposited particulate smoking material. This results in the location of the fibriform smoke-modifying material generally at the center of the smoking material rod. It is important to note that the fibriform smoke-modifying material enters into the

deposition run and travels in the deposition run in the direction of travel of the suction band.

In the first Office Action of May 22, 2002, claims 19-37 were rejected under 35 U.S.C. 112, second paragraph as being indefinite. The Examiner noted various limitations in these claims which lacked proper antecedent basis. Claims 19, 21-23, 26 and 29-31 were also noted as being indefinite because they use the term "predetermined."

Claims 19-23, 25-27, 32, 37 and 38 were rejected under 35 U.S.C. 102(b) as being anticipated by EP 0 405 929 to Haws. Claims 19-27, 29-32, 37 and 38 were also rejected under 35 U.S.C. 103(a) as being unpatentable over Haws. Claims 28 and 33-36 were indicated as being allowable if rewritten to overcome the rejections under 35 U.S.C. 112, second paragraph.

Claims 19-38, all of the claims, as filed have been amended. Claims 19-37, as amended, are believed to comply fully with 35 U.S.C. 112, second paragraph and are believed to patentably point out and to distinctly claim the subject matter which applicant believes to be the invention. The various instances of language in these claims, noted by the Examiner as having insufficient antecedent basis, have been revised. It is believed that the limitations noted by the Examiner, and others noted by the undersigned, have been set forth in proper form. Claim 38, while not objected to by the Examiner under 35 U.S.C. 112, second paragraph, has also been amended to make its claimed method more clearly set forth.

The Examiner's indication of the allowability of claims 28 and 33-36, if presented in independent form, and rewritten to overcome the rejections under 35 U.S.C. 112, second paragraph, is noted with appreciation. Newly presented claims 39-43 are these claims presented in independent form. It is believed that these claims are now allowable.

Turning to the Examiner's rejections of claims 19-27, 29-32 and 37, 38 over EP 0 405 929 under 35 U.S.C. 102(b), 103(a) or both, it is believed that these claims, as filed, and even more clearly as amended are patentable for the following reasons. In the Haws references there is disclosed a method for applying a liquid (emphasis added) strand to a cigarette rod. The liquid is extended in strands that are applied to loose tobacco filler in the chimney section of a cigarette machine. This is quite clearly very different from the subject invention, as recited in the claims which require a fibriform material to be added to the particulate smoking material after that material has been deposited on a suction belt in the deposition run portion of the cigarette making machine, not in the chimney section.

With respect to the rejection of claims 19-23, 25-27, 32, 37 and 38 as being anticipated by Haws, it is clear that, as discussed above, there is no anticipation of these claims. Haws does not provide any teaching of the incorporation of a fibriform smoke-modifying material into a smoking material rod. Haws is described to the application of liquid strands into a cigarette rod. With respect to claims 19, 26 and the claims that depend from them, Haws provides no direct teaching of the feeding of any

material to the rod-making machine along a path that is longitudinal in the direction of travel of the suction band in the machine. It is clear from a review of Figs. 1, 2 and 4 of Haws that the pipe which supplies the liquid to the rod making machine is in the tobacco chimney of the machine and this is perpendicular to the path of travel of tobacco as it is formed into the rod of material. For these reasons, claims 19 and 26, as well as the claims which depend from them are not anticipated by the Haws reference.

Claims 19 and 38 of the subject application, as filed, and even more clearly as amended, do not recite the presence of a guide for feeding the fibriform material into the rod-making machine. The fibriform material has sufficient rigidity and is sufficiently self-supporting that it does not require a guide. The guide that is recited in claim 26 increases the precision of incorporation of the fibriform material into the smoking material rod. The asserted guide means of Haws, which is in fact the liquid nozzle is essential to the operation of the Haws device since the liquid disclosed in Haws cannot be incorporated into a tobacco rod in the absence of such a nozzle.

With respect to independent claim 38, the Haws reference does not provide any teaching of the incorporation of a fibriform element into the rod. Furthermore, Haws does not teach or suggest the introduction of an element in a rod-making machine at a distance spaced from the suction band of the rod-making machine. Haws, at Column 3, lines 43-45 recites that "the liquid is pumped from storage means 50 through pipe 51, and out through nozzle 58. The liquid is initially placed against tobacco which was

accumulated against belt 21..." (emphasis added). Haws does not anticipate the method of incorporating fibriform smoke-modifying material in a smoking material rod. Thus claims 19, 26 and 38, as well as the claims that depend therefrom are not anticipated by EP 0 405 929 to Haws.

With respect to the Examiner's rejections of claims 19-27, 29-32, 37 and 38 as being obvious to one of skill in the art over Haws, it is respectfully asserted that the subject invention, as set forth in the above-recited claims, as filed, and even more clearly as amended is not obvious over Haws for at least the several following reasons. Initially, with respect to claims 19 and 26, Haws shows in Figs. 1 and 2, that the feed path of the liquid strand is perpendicular to, not longitudinal to the rod-making machine and to the path of suction band travel in the rod-making machine. The piping in Haws, that provides liquid to the nozzle, travels up through the tobacco chimney and turns through 90° to place the liquid into the tobacco rod. This disclosed configuration would not be appropriate to the method of the present invention, as set forth in the amended claims. The inclusion of a nozzle, as disclosed in Haws, in the machine of the subject invention, and for a use as recited in the claims, would result in a disruption of the flow of particulate smoking materials up through the tobacco chimney and onto the suction band. This would result in less precision in the location of the rod of fibriform material within the rod formed by the rod-making machine. Such precision is clearly not important in Haws which recites, at Column 5, lines 55-58 that "This reduces the precision required in manufacturing because the strand need only be kept a sufficient

distance from the edge of the rod to prevent staining the wrapper." Clearly, Haws is not concerned with the placement of the smoke-modifying material at a particular location in the tobacco rod. Such a precise placement of the fibriform material of the present invention, at a specific location in the rod is important and it attained by the method recited in the claims.

As set forth in claims 19, 26 and 38 of the present application, as filed, and as amended, the fibriform element is caused to ascend toward the deposition run under the influence of the suction force applied to the suction band. In the Haws reference, "the liquid strand is initially placed against tobacco...", as recited at Column 3, lines 45-46. Haws then recites, at Column 4, lines 47-49 that "The flowing air cause the liquid extrudate to become impinged upon the tobacco." As is confirmed further in Column 4 of the Haws reference "As the liquid is extruded and is subjected to the force of the air flowing through perforated belt 12, the liquid in the strands disperses slightly, filling gaps between the loose tobacco particles.". It is clear that spacing the smoke-modifying materials at a distance from the suction band and/or causing the material to ascend toward the deposition run under the influence of the suction force applied to the suction band is neither taught or suggested by Haws. In fact, Haws teaches a contradictory method because the liquid strand is initially placed on the tobacco and is caused to diffuse under suction. The method of the present invention would be wholly inappropriate for the inclusion of even highly viscous liquids. Any distance of the introduction of the liquids from the deposition run would cause the liquid to disperse

under the action of the suction force applied to the suction band. This would result in contamination of the rod maker. A person of skill in the art, having the benefit of the Haws reference, would not be led to the subject invention, as recited in amended claims 19-27, 29-32, 37 and 38. Accordingly, these claims are also believed not to be obvious over the Haws reference.

The several additional references cited in the Information Disclosure Statement, and acknowledged by the Examiner, have again been reviewed. Since they were not relied on in the rejections of the claims, no further discussion thereof is required.

SUMMARY

Claims 19-38 have been amended and new claims 39-43 have been added. It is believed that all of the claims now pending in the subject patent application are patentable over the prior art cited and relied on by the Examiner. Allowance of the claims, and passage of the application to issue is respectfully requested.

Respectfully submitted,

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MARKED-UP COPY OF AMENDED CLAIMS 19-38

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19. (Amended) A method of incorporating fibriform smoke-modifying material in a smoking material rod, the method, comprising:

providing a smoking material rod-making machine;

including a suction band in said smoking material rod making machine,
said suction band having a travel direction and forming a smoking material deposition
run having a start and an end;

applying a suction force to said suction band;

depositing particulate smoking material on said suction band along said
smoking material deposition run between said start and said end of said smoking
material deposition run;

feeding fibriform smoke-modifying material longitudinally to said smoking
material [a] rod-making machine along a longitudinal feed path in said smoking material
rod-making machine, said longitudinal feed path being in said [a] travel direction of said
[a] smoking material deposition run of said [a] suction band of said smoking material
rod-making machine;

causing said longitudinal feed path of said fibriform smoke-modifying
material to ascend toward said suction band [deposition run] under the influence of said
[the] suction force [until,] at a [predetermined] distance along said smoking material
deposition run intermediate said start and end;[,]

supporting said fibriform material and maintaining said fibriform material

[becomes supported and is subsequently maintained] at a [predetermined] position spaced from said suction band [run] by said [a] particulate smoking material deposited on said suction band before, in said travel direction, said ascent of said longitudinal feed path [run]; and

depositing additional particulate [said] smoking material on said suction band along said smoking material deposition run after, in said travel direction, said ascent of said longitudinal feed path.

20. (Amended) The method according to claim 19 further including [the step of] providing said fibriform smoke-modifying material in the form of a single, continuous, fibriform element.

21. (Amended) The method according to claim 19 further including [the step of] selecting said intermediate [predetermined] distance along said deposition run to be in a mid zone [of that portion] of said deposition run between said start of [which extends from the location at which smoking material is first deposited on] said deposition run and said end of said [to a downstream location at which the smoking material] deposition run [is terminated].

22. (Amended) The method according to claim 21 further including [the step of] selecting said intermediate [predetermined] distance along said deposition run to be located between about 25% and about 60% of a [the] length [of said portion] of said

deposition run [as] taken from said start of [the location at which smoking material is first deposited on] said deposition run.

23. (Amended) The method according to claim 22 further including [the step of] selecting said intermediate [predetermined] distance along said deposition run to be located between about 25% and 40% of said length.

24. (Amended) The method according to claim 19 further including causing said feed path of said fibriform smoke-modifying material to ascend at an angle and [the step of] controlling said [the] angle of said ascent of said feed path of said fibriform smoke-modifying material so that said angle of said ascent is not more than about 5 degrees from horizontal.

25. (Amended) The method according to claim 19 further including [the step of] feeding said fibriform smoke-modifying material [element] to said smoking material rod-making machine at a fixed speed in relation to a speed [that] at which said smoking material rod-making machine is run.

26. (Amended) A method of incorporating fibriform smoke-modifying material in a smoking rod material, said method comprising:

providing a smoking material rod-making machine;

including a suction band in said smoking material rod-making machine,

said suction band having a travel direction and forming a smoking material deposition run having a start and an end;

applying a suction force to said suction band;

depositing particulate smoking material on said suction band along said smoking material deposition run between said start and said end of said smoking material deposition run;

feeding [longitudinally] a fibriform smoke-modifying material to said smoking material [a] rod-making machine along a longitudinal feed path, said longitudinal [wherein the] feed path in said smoking material rod-making machine extending [extends] in said [the] travel direction of said [the] smoking material deposition run of said [a] suction band of said smoking material rod-making machine;

providing a fibriform smoke-modifying material guide in said smoking material rod-making machine;

constraining said fibriform material by said [a] guide in said smoking material rod-making machine to follow [so that said fibriform material follows] said longitudinal feed path spaced from said [run of said] suction band and to be [is] constrained against movement in response to said [a] suction force toward said suction band [run] until [at] a [predetermined] distance along said smoking material deposition run intermediate said start and said end of said smoking material deposition run, said fibriform material being [becomes] supported and [is subsequently] maintained at a [predetermined] position spaced from said suction band [run] by [a] particulate smoking material deposited on said suction band before, in said travel direction, and by said

guide [run]; and

depositing additional particulate smoking material on said suction belt
along said smoking material deposition run after, in said travel direction, said guide.

27. (Amended) The method according to claim 26 further including [the step of] providing said fibriform smoke-modifying material as [in the form of] a single, continuous, fibriform element.

28. (Amended) The method according to claim 26 further including [the step of] feeding said fibriform smoke-modifying material to and into contact with said particulate smoking material as [in the form of] a sequence of discrete fibriform elements.

29. (Amended) The method according to claim 26 further including [the step of] selecting said intermediate [predetermined] distance along said deposition run to be in a mid zone [of that portion] of said deposition run between said start of [which extends from the location at which smoking material is first deposited on] said deposition run and said end of said [to a downstream location at which the smoking material] deposition run [is terminated].

30. (Amended) The method according to claim 29 further including [the step of] selecting said intermediate [predetermined] distance along said deposition run to be located between about 25% and about 60% of a [the] length [of said portion] of said

deposition run [as] taken from said start of [the location at which smoking material is first deposited on] said deposition run.

31. (Amended) The method according to claim 30 further including [the step of] selecting said intermediate [predetermined] distance along said deposition run to be located between about 25% and 40% of said length.

32. (Amended) The method according to claim 26 further including [the step of] feeding said fibriform material along [a portion of] said longitudinal feed path which extends beneath said smoking material deposition run at a constant vertical distance from [said deposition run of] said suction band.

33. (Amended) The method according to claim 26 further including [the step of] providing said guide having [in] a configuration such that said feed path ascends toward said suction band [deposition run].

34. (Amended) The method according to claim 26 further including [the step of] providing a streamlined fairing on said guide.

35. (Amended) The method according to claim 26 further including providing a flow path for said particulate smoking material and [the step of] enlarging said [the] flow path of said particulate smoking material in the vicinity of said guide.

36. (Amended) The method according to claim 26 further including varying said [the step of modifying the degree of] suction force along [at that portion of] said smoking material deposition run overlying said guide relative to said [the degree of] suction force along a [over the] remainder of said smoking material deposition run.

37. (Amended) The method according to claim 26 further including [the step of] feeding said fibriform element to said smoking material rod-making machine at a fixed speed in relation to a speed [that] at which said smoking material rod-making machine is run.

38. (Amended) A method for incorporating a fibriform element in a smoking material rod, said method comprising:

providing a smoking material rod making machine having a suction band exerting a suction force for supporting and transporting [a layer of deposited] particulate smoking material deposited on said suction band;

feeding a fibriform element to said smoking material rod making machine along a longitudinal feed path;

entering said [whereby the] fibriform element [enters] into said smoking material rod making machine at a distance spaced from said suction band; [, and whereby]

causing said fibriform element to ascend[s] toward said suction band due to said [a] suction force, said fibriform element [thereby] contacting a layer of said

particulate smoking material already deposited on said suction band; and
depositing additional smoking material on said suction band and on said
fibriform element subsequent to said entering of said fibriform element into said
smoking material rod machine.